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Building the IS Architecture Electronic Mail Software

IBM and OS/2 Take On the Clones

The Evolution of Automated Office Systems

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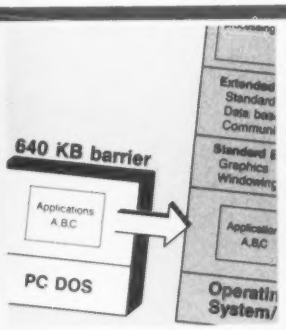

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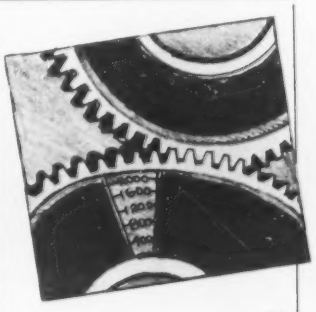

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Communications

People look to private, dedicated network when they have a problem

Public and private value-added packet-switching networks are increasing in popularity. Private data networks, specifically, are experiencing marked growth as compared to individual public carriers, according to research by Computer Intelligence Corp. (CIC), La Jolla, CA.

These value-added networks are generally based on packet-switching technology and include enhancements to the fundamental movement of data, CIC learned. Enhancements often involve code, speed and protocol conversion as well as packet assembly and disassembly. The services of public data networks are offered to companies through value-added network carriers; private data networks are built and operated for the sole use of particular business entities.

People look to dedicated, proprietary communications networks when they have a problem, according to the vice president of marketing for the world's largest supplier of private packet-switching networks. Jeff Palmer of BBN Communications Corp., Cambridge, MA, says there are five reasons why people buy networks: reliability, economy, control, flexibility and performance.

BBN has installed more than 30 private networks for such customers as MasterCard, the US Custom Service, Procter & Gamble and Barclay's. The firm's work on the Dept. of Defense's ARPANET led to the founding of Telenet, a public packet-switching network supplier subsequently sold to GTE. Both Salomon Brothers and market researcher International Data Corp. have declared BBN Communications the leading supplier of private packet-switching networks.

Palmer elaborates on the reasons why people buy networks. "The reliability includes such capabilities as automatic rerouting of data if a network node goes down," he explains. "The economies are that you can develop your own communications utility that is vendor independent. Network management is the essence of control. You have your own window into a distributed, unmanned network. You can isolate problems and get [them] repaired."

The flexibility of a private network is alluring, according to Palmer. He said the topology can be relatively arbitrary. BBN offers basically a mesh topology, but it can be modified to encompass a star. He pointed out that as the network expands, it recognizes changes and automatically reroutes communications. The user does not have to generate reroute schemes.

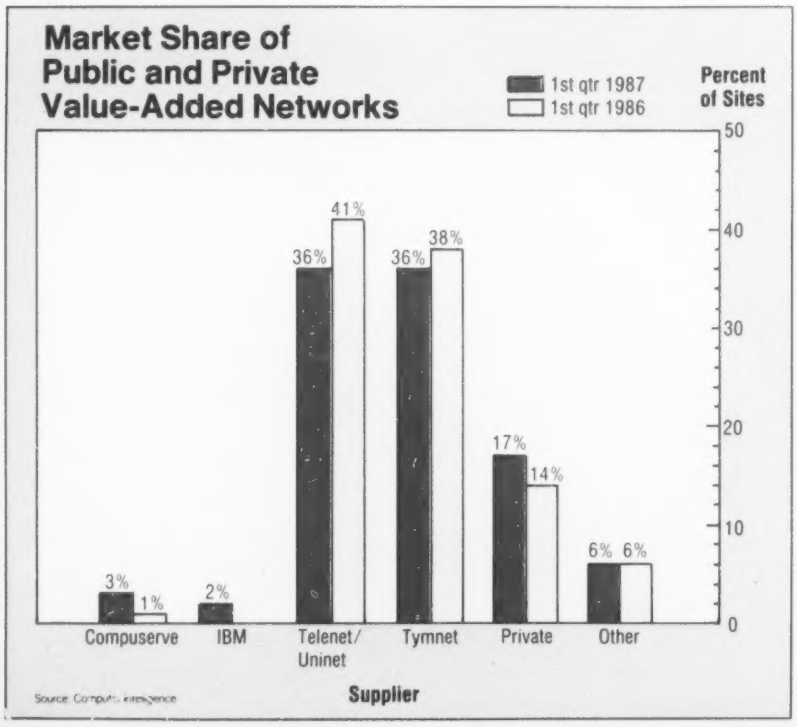
Superior performance, according to Palmer, stems from the fact that the supplier is usually focused on just one thing: end-to-end communications, in essence functioning as a front-end communications processor.

BBN's customers have elected to go with a private network for any combination of these reasons, according to Palmer. "Weyerhauser wanted to build a corporate [communications] utility," he says, "because it discovered that it was using 12 different networks. MasterCard was expanding its transaction handling worldwide and needed the flexibility to add services and applications."

The major problem facing organizations is not communications, Palmer declares. It is distributed computing. "I would argue that most data processing networks are private, not public: mainframe, modems, multidrop lines," he says.

Palmer concedes advantages do exist in some cases on the side of public networks. Public networks typically provide more cost-effective access to remote or low-traffic locations. He says they are better for low-duty cycle applications. He adds, however, that as soon as the duty cycles get heavy, private lines are the answer.

The ability of suppliers—private or public—to deploy networks has been slowed by the wait for lines, according to Palmer. "It doesn't seem to be a shortage of bandwidth in the carriers. There seems to be a shortage of personnel to write orders. We can manufacture faster than lines can be delivered," he says. —WLR



■ By R.E. (Bob) Johnston
Contributing Editor

Acquisition Insecurity

Users beware: With the acquisition of Uccel, Computer Assoc. now controls more than 50 percent of the information security software market.

For many, the acquisition of Uccel Corp. by Computer Assoc. International (CAI) spells insecurity. Five years ago few managers operating computers in the IBM MVS environment even knew of CAI. Today, most are paying more software lease/maintenance fees to CAI than any other supplier except IBM. While the merger is not final until this month, you can be assured it will happen. It was negotiated by Charles B. Wang, CAI chairman, and Swiss tycoon Walter Haefner, who holds 58 percent of Uccel. As a result, Haefner will become the largest CAI stockholder.

In a little more than 10 years, CAI has grown from a start-up company to the largest independent supplier of software. This phenomenal growth has caused many to ask whether CAI's takeover of Uccel is monopolistic. Appearances are deceiving, however. The projected annual revenue of the combined forces of CAI and Uccel ($650 to $700 million) is less than 20 percent of the more than $5 billion software income reported by IBM.

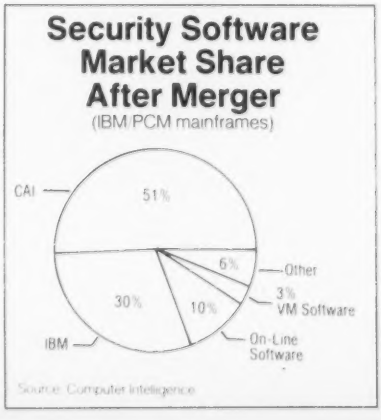
Ordinarily, information security practitioners are not concerned about corporate maneuvers. Just a little more than 18 months ago, none of us would have been concerned. Then, CAI purchased Top Secret from CGA Software. With the acquisition of Uccel, which owns ACF2, CAI now controls more than 50 percent of the information security software market. Numerous niche-market security products exist (VM, DOS/VSE and CICS), but their cumulative share is less than five percent. The Uccel acquisition leaves IBM as CAI's only true competition.

IBM is a formidable competitor in terms of gross software sales. The bulk of IBM's software revenue, however, comes from operating systems and operating-system support products (MVS, VM, DOS/VSE, RACF, CICS, IMS, DB2). The only product in this list that CAI directly competes with is RACF. CAI's other products improve on those IBM environments rather than compete with them.

CAI has become the only software supplier with a product line to service all of a customer's needs. Often the first product obtained is tape management. CAI controls two-thirds of the market having now both UCC-1 and CA/TLMS in its stable. Job scheduling is another popular tool. CAI now controls UCC-7, CA/Scheduler, ADC2 and DCMS: over 90 percent of the packages in use. With these primary areas of the MVS environment now under CAI's control, expect price increases.

Today, most are paying more software lease/ maintenance fees to CAI than any other supplier except IBM.

CAI also has strong contenders in other areas. While CAI may not currently control the lion's share in these other areas, the intriguing question is what could happen with CAI being the only vendor on the block with such a complete product line? Information security practitioner's may have cause for concern. The history of CAI as it relates to other acquisitions is worth consideration.



Some staff reductions at the larger company will occur: Redundancies will be eliminated. Conversion to CAI's support system and sales force will take place. Undoubtedly, a reduction in research and development (R&D) will occur. A good portion of R&D is devoted to making products better than the competition. Does this make sense when your biggest competitor is yourself?

A combined R&D budget in excess of $55 million leaves a good deal of room for trimming, particularly if duplication is eliminated. A lot of people argue that it would not be wise for CAI to alienate its clients by forcing them to switch. Economically, however, it appears that it would be smart. Historically, such switches forced by software firms have been successful—based on the vendor's point of view. Many clients forced to switch paint a differing picture; some even chose to switch to a third vendor.

This being the case, where do you start if you are a vendor with duplicate products? Do you act in those areas where credible competition exists or do you start where the client's choice is nil? If it chooses the path of least competition, CAI will likely trim its product offerings in the areas of security, tape management and job scheduling.

A much harder question to address is which specific products will be affected. Several factors in this decision are not known to consumers. My thoughts on this issue are biased because my company uses several CAI products. I believe, however, that CAI's decisions in this area will be based on business realities. Such issues as long-term marketability, ease of maintenance and the product's state of the art will all be important.

Many of the problems that arise as competition diminishes are detailed in my June 1987 column, "A Security Vendor's Responsibilities." In that article, I cited six major concerns: confidentiality, disclosure of flaws, escrow, customer support, maintenance and development.

I am concerned that disclosure of

flaws, customer support and maintenance will suffer as a result of the reduced competition of this merger. These areas are most frequently not given the attention they deserve. It was also these areas that were extensively discussed at the Top Secret Users Conference in 1986 and 1987.

I am concerned that a user's choice of information security products will not be as objective as in the past. The easy choice will be either IBM or CAI. Other vendors in the marketplace deserve consideration, however. They are working hard at product development and might have the best product set for a given company. Let's take a look at these firms.

- Goal Systems International, Columbus, OH, entered the security marketplace with its Alert/CICS product in 1984. It quickly grabbed a segment of this specialized security niche. Alert/VSE was subsequently introduced to address the DOS/VSE environment. Alert/VM and Alert/MVS were introduced in 1987. (Enter number 12 on the Reader Information Card for specific information on Goal Systems' security products.)
- On-Line Software International, Ft. Lee, NJ, offers the Omniguard product line. Protection is also offered for VM, DOS/VSE and MVS. Omniguard was originally a CICS-only product known as Guardian. Consequently, the lion's share of On-Line's client base is in CICS. On-Line's growth has been due in part to its ability to acquire several smaller competing companies. (Enter number 13.)
- VM Software, Reston, VA, offers VMSecure. The product has received wide acceptance because of its early entry into the VM security market. It is frequently bundled with other VM products as a complete set. (Enter number 14.)

If you are in the market for a security product in the IBM mainframe arena, the big guys must also be considered. CAI markets ACF2 and CA/Top Secret. ACF2 offers protection for MVS, VM and DOS/VSE. CA/Top Secret offers similar controls. (Enter number 15.) IBM markets RACF, which offers controls for MVS and VM. (Enter number 16.) It should be noted that the base product for MVS offered by ACF2, RACF and CA/Top Secret includes security for CICS that is not available separately. (15)

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